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| 10/652,640 | 08/28/2003 | John R. Abe | ABE1P003 | 1675 |

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| EXAMINER |
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WOO, RICHARD SUKYOON

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| ART UNIT | PAPER NUMBER |
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3639

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/652,640

Applicant(s)

ABE, JOHN R.

Examiner

Richard Woo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 15-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 15-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 1, 2005 has been entered.
- 2) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

- 3) Applicant's arguments, filed March 01, 2005, with respect to rejections under 35 U.S.C. sections 101 (except for Claims 17-18), 112, 102 and 103 have been fully considered and are persuasive. The rejections of Claims 1-5, 15-37 have been withdrawn.

Claim Rejections - 35 USC § 101

- 4) Claims 17-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Although Claim 17 is directed to a system, the whole claim is deemed nothing but LOGIC or software that is non-statutory subject matter per se. The applicant is advised

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to amend the claim such that it should become a computer readable medium claim (like Claim 18) or to include a tangible, concrete and useful limitations (e.g. a computer processor, a storage for storing logics, or other data processing system).

In Claim 18, the computer program itself cannot be directed to a practical application of the invention in the useful art to accomplish a concrete, useful, and tangible result. When the computer program is actually executed by the computer, the claimed subject matter produces a useful, concrete and tangible result. The applicant is respectfully requested to include the above underlined languages in the preamble.

Claim Rejections - 35 USC § 102

5) Claims 1-5, 15-16-25 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Reuhl et al. (US 5,873,069).

As for Claim 1, Reuhl et al. discloses a method comprising:

receiving a price frequency mathematical distribution of prices associated with at least one non-optimized supplier (see Figs. 5-6, 8, 15A-15C, 17-35; col. 3, line 5 – col. 4, line 56);

storing the distribution of prices (see Fig. 5);

receiving a number of competitors, a business objective, and a cost associated with a good or service (see Supra Figs.);

storing the number of competitors, business objective, and cost (see Figs. 5-6);

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producing a set of non-optimized prices based on the distribution of prices, by selecting at least one non-optimized price for each competitor (see Figs. 15A-15C, 17-35);

calculating an optimal price based on the selected non-optimized prices, a number of competitors, business objective, and cost associated with the good or service (see *Id.*),

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see *Supra* Figs. 15A-15C, 17-35 and the descriptions thereof);

displaying the calculated optimal price for accomplishing the business objective (see *Supra* Figs. 15A-15C, 17-35);

simulating the optimal price to generate an updated optimal price by identifying a result of utilizing the optimal price (see *Id.*);

displaying the updated optimal prices.

As for Claim 2, Reuhl et al. further discloses the method including receiving a plurality of sets of one or more prices (see *Supra* Figs. 15A-15C, 17-35).

As for Claim 3, Reuhl et al. further discloses the method, wherein the sets of one or more prices are customizable (see *Id.*).

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As for Claim 4, Reuhl et al. further discloses the method including comparing the sets of one or more prices (see Id.).

As for Claim 5, Reuhl et al. further discloses the method including reporting on the comparison (see Supra columns).

As for Claim 15, Reuhl et al. further discloses the method, wherein the method is performed by a plurality of components including a frequency distribution engine, a probability of win engine, an expected results engine, an optimization update engine, a bid engine, a market place engine, and a financial accumulator engine (see Fig. 2 for the pricing program or engine).

As for Claim 16, Reuhl et al. further discloses the method, wherein the method is performed by a plurality of components selected from the group consisting of a frequency distribution engine, a probability of win engine, an expected results engine, an optimization update engine, a bid engine, a market place engine, and a financial accumulator engine (see Id.).

As for Claim 19, Reuhl et al. further discloses the method, wherein a GUI is included (see Supra Figs. 15A-15C, 17-35).

As for Claim 20, Reuhl et al. further discloses the method, wherein GUI is used for input (see Fig. 7).

As for Claim 21, Reuhl et al. further discloses the method, wherein GUI is used for any kind of input (see Id.).

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As for Claim 22, Reuhl et al. further discloses the method, wherein the price frequency mathematical distribution is used to estimate the set of the competitor prices (see Supra Figs. 15A-15C, 17-35 and the descriptions thereof).

As for Claim 23, Reuhl et al. further discloses the method, wherein the price frequency distribution is estimated using the set of competitor prices (see Id.).

As for Claim 24, Reuhl et al. further discloses the method, wherein the distribution is converted to an expected probability of a customer purchase based on the number of competitions (see Id.).

As for Claim 25, Reuhl et al. further discloses the method, wherein the distribution is converted to a table of prices with a frequency of a price within the table corresponding to the distribution (see Supra Figs. 15A-15C, 17-35 and the descriptions thereof).

As for Claim 29, Reuhl et al. further discloses the method, wherein a maximum revenue value and a maximum profit value are identified along with corresponding prices (see Supra Figs. 15A-15C, 17-35 and the descriptions thereof).

As for Claim 30, Reuhl et al. further discloses the method, wherein a probability of a customer purchase is determined for the optimal price (see Id.).

As for Claim 31, Reuhl et al. further discloses the method, wherein a number of selected prices corresponding to the number of competitors is chosen, wherein the selection of the prices is performed in a random manner (see Id.).

As for Claim 17, Reuhl et al. discloses an optimal price simulator system comprising:

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logic for receiving a price frequency mathematical distribution of prices associated with at least one non-optimized supplier (see Figs. 5-6, 8, 15A-15C, 17-35; col. 3, line 5 – col. 4, line 56);

logic for storing the distribution of prices (see Fig. 5);

logic for receiving a number of competitors, a business objective, and a cost associated with a good or service (see Supra Figs.);

logic for storing the number of competitors, business objective, and cost (see Figs. 5-6);

logic for producing a set of non-optimized prices based on the distribution of prices, by selecting at least one non-optimized price for each competitor (see Figs. 15A-15C, 17-35);

logic for calculating an optimal price based on the selected non-optimized prices, a number of competitors, business objective, and cost associated with the good or service (see Id.),

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see Supra Figs. 15A-15C, 17-35 and the descriptions thereof);

logic for displaying the calculated optimal price for accomplishing the business objective (see Supra Figs. 15A-15C, 17-35);

logic for simulating the optimal price to generate an updated optimal price by identifying a result of utilizing the optimal price (see Id.);
logic for displaying the updated optimal prices.

As for Claim 18, Reuhl et al. discloses a computer program product for optimizing an optimal price comprising:

computer code for receiving a price frequency mathematical distribution of prices associated with at least one non-optimized supplier (see Figs. 5-6, 8, 15A-15C, 17-35; col. 3, line 5 – col. 4, line 56);

computer code for storing the distribution of prices (see Fig. 5);

computer code for receiving a number of competitors, a business objective, and a cost associated with a good or service (see Supra Figs.);

computer code for storing the number of competitors, business objective, and cost (see Figs. 5-6);

computer code for producing a set of non-optimized prices based on the distribution of prices, by selecting at least one non-optimized price for each competitor (see Figs. 15A-15C, 17-35);

computer code for calculating an optimal price based on the selected non-optimized prices, a number of competitors, business objective, and cost associated with the good or service (see Id.),

wherein the business objective is selected from the group consisting of maximizing revenue for a good or service, maximizing gross profit for the good or

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service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service (see Supra Figs. 15A-15C, 17-35 and the descriptions thereof);

computer code for displaying the calculated optimal price for accomplishing the business objective (see Supra Figs. 15A-15C, 17-35);

computer code for simulating the optimal price to generate an updated optimal price by identifying a result of utilizing the optimal price (see Id.);

computer code for displaying the updated optimal prices.

Claim Rejections - 35 USC § 103

6) Claims 26-28 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuhl et al..

Reuhl et al. discloses the invention as recited above but does not expressly claim limitations in Claims 26-28.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify Reuhl et al. such that each price, probability of a customer purchase, and cost-per-unit are used to form a partial income statement for each member of the plurality of prices; each partial income statement is comprised of financial terms including revenue, cost of goods and gross profit; and a set of the partial income statements are stored because Applicant has not

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disclosed that forming and utilizing the partial income statement, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the optimization engine of Reuhl et al. because it would provide a system of processing automated pricing of retail goods and merchandise responsive to market price changes and an enterprise-wide data structure and database for an integrated retail price information storage, processing and reporting system.

Therefore, it would have been an obvious matter of design choice to modify Reuhl et al. to obtain the invention as specified in claims 26-28 for the purpose of providing a system including an integrated price, information processing and reporting system which has a relational database established at the onset, and encompassing all of the price data requirements of the seller.

As for Claims 32-37, Reuhl et al. discloses the invention as recited above but does not expressly claim limitations in Claims 32-37.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify Reuhl et al. to identify the lowest price as a winning bid along with a corresponding supplier; add the winning bid and the probability of a customer purchase to an actual results table; calculate the value for competition by summing each event of randomly selecting a set of prices

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corresponding to the number of competitors; calculate the value representing a sum of wins corresponding to the supplier; calculate the actual win-rate by dividing the sum of wins by the value for competition; and adjust the price-frequency distribution so that a new expected probability of a customer purchase is equal to the actual winrate, and recorded values of wins and competition are set to zero because Applicant has not disclosed that utilizing mathematical distribution and win-rate provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the optimization engine of Reuhl et al. because it would provide a computerized price control system for implementing pricing standards/policies, wherein the pricing policies are directed to having the lowest price for any particular item or a substantially similar item in a particular market.

Therefore, it would have been an obvious matter of design choice to modify Reuhl et al. to obtain the invention as specified in claims for the purpose of providing a computerized price control system for implementing pricing standards/policies, wherein the pricing policies are directed to having the lowest price for any particular item or a substantially similar item in a particular market.

Conclusion

7) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US 6,553,346 is cited to show a conditional purchase offer management system that reserves a margin off of the total offer price, before calculating the offer price for each component CPO, wherein the reserved margin may be utilized to increase the offer price of one or more component CPO that remain unaccepted by sellers.

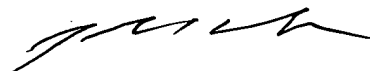
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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August 06, 2005



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